| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| L1 | 1886 | (166/319,320,321,323,332.1,334.1, 373,374).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/20 10:13 |
| L2 | 2234 | (137/624.27,494).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/20 10:13 |
| L3 | 4104 | 1 or 2 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/20 10:14 |
| L4 | 859 | 3 and ((pressure and sleeve) near5 valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/20 10:14 |
| L5 | 675 | 4 and ((move$4 shift$4 slid$4) near3 sleeve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/20 10:15 |
| L6 | 56 | 5 and packer and screen | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/20 10:15 |
| L7 | 6 | (("20010030049") or ("4420043")).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/20 10:25 |
| L8 | 50 | 4 and (gravel near4 pack$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/20 10:26 |

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| S1 | 3 | (("RE23842") or ("4306339")).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/05/17 07:41 |
| S2 | 2 | (("6722440") or ("6397949")).PN. | USPAT; USOCR | OR | OFF | 2004/05/13 07:19 |
| S3 | 48 | ("0013415"\|"3749119"\|"3823773"\|"3845815"\|"3970147"\|"3993130"\|"0030049"\|"4383578"\|"4388968"\|"4420043"\|"4749044"\|"4940093"\|"4967845"\|"5137088"\|"5180007"\|"5180016"\|"5226494"\|"5413180"\|"5456322"\|"5609204"\|"5676208"\|"6220357"\|"6227298"\|"6446729").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/10 15:20 |
| S4 | 10 | ("3749119" \| "3823773" \| "3845815" \| "3970147" \| "3993130" \| "4383578" \| "4749044" \| "4967845" \| "5609204" \| "5676208").PN. | USPAT | OR | ON | 2004/05/10 15:37 |
| S5 | 1575 | (166/319,320,321,323,332.1,334.1,373,374).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/05/10 15:38 |
| S6 | 1308 | ((166/319,320,321,323,332.1,334.1,373,374).CCLS.) and valve | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/10 15:38 |
| S7 | 913 | (((166/319,320,321,323,332.1,334.1,373,374).CCLS.) and valve) and ((open and closed) near4 (closure sleeve position lock)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/10 15:39 |
| S8 | 62 | ((((166/319,320,321,323,332.1,334.1,373,374).CCLS.) and valve) and ((open and closed) near4 (closure sleeve position lock))) and (pressure near5 lock) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/13 07:13 |
| S9 | 33 | (((((166/319,320,321,323,332.1,334.1,373,374).CCLS.) and valve) and ((open and closed) near4 (closure sleeve position lock))) and (pressure near5 lock)) and (shear snap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/10 15:40 |
| S10 | 31 | ((((((166/319,320,321,323,332.1,334.1,373,374).CCLS.) and valve) and ((open and closed) near4 (closure sleeve position lock))) and (pressure near5 lock)) and (shear snap)) and spring | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/10 15:40 |

| S11 | 1350 | (137/624.27,494).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/05/13 07:13 |
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| S12 | 5 | ((137/624.27,494).CCLS.) and valve and ((open and closed) near4 (closure sleeve position lock)) and (pressure near5 lock) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/13 07:14 |
| S13 | 12 | ((137/624.27,494).CCLS.) and (wellbore (well adj bore)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/13 07:14 |
| S14 | 22 | (US-4940093-$ or US-5137088-$ or US-5180007-$ or US-5180016-$ or US-5226494-$ or US-4420043-$ or US-6446729-$ or US-5240071-$ or US-4388968-$).did. or (US-20010030049-$ or US-20010013415-$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/05/13 07:19 |
| S15 | 9 | (US-4940093-$ or US-5137088-$ or US-5180007-$ or US-5180016-$ or US-5226494-$ or US-4420043-$ or US-6446729-$ or US-5240071-$ or US-4388968-$).did. or (US-20010030049-$ or US-20010013415-$).did. | USPAT | OR | ON | 2004/05/13 07:19 |
| S16 | 17 | ("2545504" \| "2565731" \| "2626177" \| "2855943" \| "3024846" \| "3599713" \| "3831680" \| "4512406" \| "4651827" \| "4658902" \| "4691775" \| "4911242" \| "4957167" \| "5101904" \| "5109925" \| "5137088" \| "5156207").PN. | USPAT | OR | ON | 2004/05/13 08:42 |
| S17 | 0 | "5240071".URPN. | USPAT | OR | ON | 2004/05/13 08:44 |
| S18 | 2 | ("5609204").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/05/13 15:21 |
| S19 | 4 | (("5456322") or ("6227298")).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/05/17 07:40 |

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| S20 | 1886 | (166/319,320,321,323,332.1,334.1, 373,374).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/16 10:18 |
| S21 | 2234 | (137/624.27,494).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/16 10:18 |
| S22 | 4104 | S20 or S21 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:18 |
| S23 | 3045 | S22 and valve | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:18 |
| S24 | 2536 | S23 and (conduit port opening) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:19 |
| S25 | 596 | S24 and (close near4 (conduit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:19 |
| S26 | 1583 | S24 and (clos$4 near4 (conduit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:19 |
| S27 | 9 | S26 and (lock near4 clos$4 near4 (conudit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:23 |

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| S28 | 44 | S26 and (lock$3 near4 clos$4 near4 (conudit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:23 |
| S29 | 47 | S26 and (lock$3 near4 clos$4 near4 (conduit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:40 |
| S30 | 38 | S29 not S27 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:39 |
| S31 | 99 | S25 and (sliding near3 sleeve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:39 |
| S32 | 260 | S26 and (sliding near3 sleeve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:39 |
| S33 | 24 | S32 and ((lock$3 near4 clos$4) with (conduit port opening)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/12/16 10:41 |
| S34 | 2 | ("5609204").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/16 16:12 |